

## REMARKS

In the Final Office Action mailed September 20, 2007, the Examiner took the following action: (1) objected to claim 32 due to an informality; (2) rejected claims 1-10, 17, 19-30, 33-46, 53, 55-66, 69-78, 80, and 82-83 under 35 U.S.C. §103(a) as being unpatentable over Teller (U.S. 2006/0031102) in view of Chickering (U.S. 2005/0108285); (3) rejected claims 11, 14-16, 18, 47, 51-52, 54, 79, and 84-93 under 35 U.S.C. §103(a) as being unpatentable over Teller in view of Chickering, and further in view of Luhrs (U.S. 2005/0132300); (4) rejected claims 12, 31, 48, 67, 81, and 94 under 35 U.S.C. §103(a) as being unpatentable over Teller in view of Chickering, and further in view of Troyer (U.S. 2005/0049912); and (5) rejected claims 13, 32, 49-50, and 68 under 35 U.S.C. §103(a) as being unpatentable over Teller in view of Chickering and Troyer, and further in view of Summers (U.S. 2005/0065842). Applicants respectfully request reconsideration of the application in view of the foregoing amendments and the following remarks.

### *I. Claim Objections*

The Examiner objected to claim 32 due an incorrect dependency. Applicant has amended the informality noted by the Examiner. Therefore, Applicant respectfully requests reconsideration and withdrawal of this objection.

### *II. Rejections Under §103(a)*

Claims 1, 21, 37, 57, 73, and 84 (and claims depending therefrom)

As amended, claim 1 recites:

1. A method for representing data associable with intervals, the method comprising:  
    associating a frame with each of a number of intervals in a period;  
    identifying a first data characteristic to be identified for data associable with the number of intervals in the period, *the first data characteristic being based on a variation from an expected quantity*;  
    mining the data associable with the number of intervals in the period to identify a number of first significant intervals, the first significant intervals being intervals for which the first data characteristic is manifested in data associated with each of the first significant intervals; and  
    presenting in the frame associated with each of the first significant intervals a first representation of the data indicative of the first data characteristic, *wherein the frame comprises a rectangular area and wherein the first representation comprises one or more rectangular columns adjacently disposed within at least a portion of the rectangular area*, the one or more rectangular columns having a first visual characteristic first representation. (emphasis added).

Limitations similar or identical to the above-italicized portions of claim 1 have been added to each of the other independent claims of the application (claims 21, 37, 57, 73, and 84). For the sake of brevity, in the following discussion, reference will be made primarily to the limitations recited in claim 1, however, it will be appreciated that these remarks may also generally apply, in whole or in part, to the other independent claims.

Teller (U.S. 2006/0031102)

Teller teaches systems and methods for detecting and monitoring human physiological information using a sensor configured to generate data indicative of the physiological information, a central monitoring unit that receives and analyzes the data, and means for communicating, storing, and displaying the data. (Paragraphs [0005]-[0006]; [0071]-[0073]). In relevant part, Teller teaches displaying such data, either individually or with other categories of

data, in “piston levels” (i.e. bar graphs) over a user-determined interval, such as days or weeks. ([0073]; Fig. 11).

Applicant respectfully submits that Teller fails to disclose, teach, or fairly suggest the method recited in claim 1. Specifically, Teller fails to teach or suggest a method that includes in relevant part “identifying a first data characteristic to be identified for data associable with the number of intervals in the period, *the first data characteristic being based on a variation from an expected quantity*,” and “presenting in the frame associated with each of the first significant intervals a first representation of the data indicative of the first data characteristic, *wherein the frame comprises a rectangular area and wherein the first representation comprises one or more rectangular columns adjacently disposed within at least a portion of the rectangular area*.”

In relevant part, Teller teaches presenting a Sleep Health Index as a “piston level” or bar graph. (Teller, sections 67-68; Figure 8). There is, however, no teaching or suggestion in Teller of “identifying a first data characteristic to be identified for data associable with the number of intervals in the period, *the first data characteristic being based on a variation from an expected quantity*,” and “presenting in the frame associated with each of the first significant intervals a first representation of the data indicative of the first data characteristic, *wherein the frame comprises a rectangular area and wherein the first representation comprises one or more rectangular columns adjacently disposed within at least a portion of the rectangular area*” as recited in claim 1. Thus, claim 1 is allowable over Teller.

Chickering (U.S. 2005/0108285)

Chickering teaches a system and method “that allows information about categories (clusters or classes) to be presented in an understandable display.” (para. 13). According to Chickering, category attributes are displayed as a “diamond and bar display” (para. 15, 56), or as a “rectangular histogram display” (para. 16, 62).

Applicant respectfully submits that Chickering, either singly or in combination with Teller, fails to disclose, teach, or fairly suggest the method recited in claim 1. Specifically, Chickering fails to teach or suggest a method that includes in relevant part “identifying a first data characteristic to be identified for data associable with the number of intervals in the period, *the first data characteristic being based on a variation from an expected quantity,*” and “presenting in the frame associated with each of the first significant intervals a first representation of the data indicative of the first data characteristic, *wherein the frame comprises a rectangular area and wherein the first representation comprises one or more rectangular columns adjacently disposed within at least a portion of the rectangular area.*” Chickering is silent as to the above-noted recitations of claim 1. Therefore, claim 1 is allowable over Chickering and Teller.

Luhrs (U.S. 2005/0132300)

Luhrs teaches color-codeable calendars. ([0005]-[0006]). According to Luhrs, color-coding of various activities enables a user to analyze and identify trends more readily than with words or non-color-related variables. ([0010]; [0004]). As best shown in Figures 3 and 4, Luhrs uses color-coded circles 60 over a selected interval to enable a user to analyze and identify information. ([0031]-[0033]).

Luhrs fails to remedy the above-noted deficiencies of Teller and Chickering. Specifically, Luhrs fails to teach or suggest a method that includes in relevant part “identifying a first data characteristic to be identified for data associable with the number of intervals in the period, *the first data characteristic being based on a variation from an expected quantity,*” and “presenting in the frame associated with each of the first significant intervals a first representation of the data indicative of the first data characteristic, *wherein the frame comprises a rectangular area and wherein the first representation comprises one or more rectangular columns adjacently disposed within at least a portion of the rectangular area.*” Luhrs is silent as

to the above-noted recitations of claim 1. Therefore, claim 1 is allowable over Luhrs, Chickering, and Teller.

Troyer (U.S. 2005/0049912)

Troyer teaches methods for reporting on the quality of a repair process. According to Troyer, data on the occurrences of quality problems that occur in a repair shop are generated, sorted, and produced into a report. (para. 8). The data may be sorted according to repair stages or numerous other factors. (para. 10).

Again, Troyer fails to remedy the above-noted deficiencies of Teller, Chickering, and Luhrs. Specifically, Troyer fails to teach or suggest a method that includes in relevant part “identifying a first data characteristic to be identified for data associable with the number of intervals in the period, *the first data characteristic being based on a variation from an expected quantity*,” and “presenting in the frame associated with each of the first significant intervals a first representation of the data indicative of the first data characteristic, *wherein the frame comprises a rectangular area and wherein the first representation comprises one or more rectangular columns adjacently disposed within at least a portion of the rectangular area*.” Troyer is silent as to the above-noted recitations of claim 1. Therefore, claim 1 is allowable over Troyer, Luhrs, Chickering, and Teller.

Summers (U.S. 2005/0065842)

Summers teaches a system for coordinating product inspection, repair, and maintenance that uses a proactive, data-driven process. According to Summers, a change control process receives and analyzes proposed changes to a standard baseline, determines whether proposed changes should be adopted, and notifies users accordingly. (para. 52). Historical data are analyzed to identify problems and related safety information that might otherwise not be known by an inspector. (para. 57).

Summers fails to remedy the above-noted deficiencies of Teller, Chickering, Luhrs, and Troyer. Specifically, Summers fails to teach or suggest a method that includes in relevant part “identifying a first data characteristic to be identified for data associable with the number of intervals in the period, *the first data characteristic being based on a variation from an expected quantity*,” and “presenting in the frame associated with each of the first significant intervals a first representation of the data indicative of the first data characteristic, *wherein the frame comprises a rectangular area and wherein the first representation comprises one or more rectangular columns adjacently disposed within at least a portion of the rectangular area*.” Summers is silent as to the above-noted recitations of claim 1. Therefore, claim 1 is allowable over Summers, Troyer, Luhrs, Chickering, and Teller.

For the foregoing reasons, claim 1 is allowable over the Cited References (Teller, Chickering, Luhrs, Troyer, and Summers) either singly or in any properly motivated combination. Similarly, since the same recitations are recited in the other independent claims, all of the independent claims (claims 21, 37, 57, 73, and 84) are also allowable over the Cited References for the reasons set forth above. Furthermore, all dependent claims (2-20, 22-36, 38-56, 58-72, 74-83, and 85-94) are also allowable over the Cited References, at least due to their dependencies on the independent claims, and also due to additional limitations recited in those claims. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejections of claims 1-94 over the Cited References.

Dependent Claims 6, 8-9, 26, 28-29, 42, 44-45, 62, 64-65, 74, 76-77, 85, and 87-88

Furthermore, as amended, dependent claim 6 recites:

6. The method of Claim 1, wherein *mining the data includes identifying at least one streak having a plurality of adjacent first significant intervals*. (emphasis added).

Similarly, dependent claim 8 recites:

8. The method of Claim 6, further comprising:  
identifying a second data characteristic for time-related data based on a second variation from the expected quantity;  
mining the time-related data to identify a number of second significant intervals for which the second data characteristic is manifested in time-related data associated with each of the second significant intervals; and  
presenting in the frame associated with each of the second significant intervals a second representation of the time-related data indicative of the second data characteristic, wherein the second representation comprises one or more adjacently disposed rectangular columns having a second visual characteristic that differs from the first visual characteristic. (emphasis added).

Similarly, dependent claim 9 recites:

9. The method of Claim 8, wherein mining the data includes *identifying at least one first streak having a plurality of adjacent first significant intervals, and identifying at least one second streak having a plurality of adjacent second significant intervals.* (emphasis added).

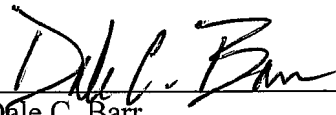
The additional recitations recited in claims 6, 8, and 9 are also not taught or fairly suggested by the Cited References. In addition, dependent claims 26, 42, 62, 74, and 85 recite limitations substantially similar to those in claim 6, dependent claims 28, 44, 64, 76, and 87 recite limitations substantially similar to those in claim 8, and dependent claims 29, 45, 65, 77, and 88 recite limitations substantially similar to those in claim 9. Therefore, by analogous reasoning, these claims are also allowable over the Cited References for the same reasons as claims 6, 8, and 9.

### CONCLUSION

For the foregoing reasons, Applicant respectfully submits that claims 1-94 are now in condition for allowance. If there are any remaining matters that may be handled by telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Respectfully Submitted,

Dated: Feb. 28, 2008

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